

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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JUL 25 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of

Amendment of Part 73 of the)
Commission's Rules to More Effectively)
Resolve Broadcast Blanketing Interference,)
Including Interference to Consumer Electronics)
and Other Communications Devices)

MM Docket No. 96-62

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**REPLY COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS
AND THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.**

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EXECUTIVE SUMMARY

NAB herein reiterates -- in the context of replying to several parties filing initial comments, the points made in its own comments in the instant proceeding. NAB underscores its position that broadcasters should not be subjected to more onerous obligations, such as: (1) extending blanketing obligations to a range of other electronic equipment (such as telephone receivers -- either mobile or hard wire -- cable converters or any other “network” or “network terminal devices”); (2) mandating any “resolution” or “information” obligation after a year of the station’s operation with its new or modified facilities; (3) imposing any special obligations *vis-à-vis* locations of “temporary lodging or transient residences” or (4) extending blanketing regulations to the broadcast television service. The Commission’s *Notice* had proposed these kinds of extensions of broadcasters’ responsibilities and certain parties filing initial comments had supported these notions.

As set for in these reply comments and in our initial comments, the Commission should direct its regulatory efforts to the real cause of blanketing interference: the deficient design characteristics of electronic equipment which is unnecessarily susceptible to such blanketing effects. It is the responsibility of these device manufacturers, as well as the communications companies that employ them (*e.g.*, telephone companies and cable operators) to take their own steps to avoid blanketing effects.

Mandatory radio frequency immunity requirements should be adopted for all consumer electronics equipment, including telephone terminal equipment. The consumer electronics industry has displayed virtually no sense of manufacturing responsibility when

it comes to the issue of RF immunity. It is unlikely that, without a mandatory requirement, manufacturers of consumer electronics will do anything to alleviate any RF interference problems experienced by their customers.

Also, none of the commenters in this proceeding has provided any evidence to support the imposition of blanketing interference requirements on television broadcasters. In fact, the commenters who are most directly involved in the resolution of blanketing interference complaints say that there is no clear basis for the establishment of blanketing interference rules for television broadcasting and that TV blanketing interference is not a significant problem requiring a specific rule.

NAB also believes that a 4 V/m blanketing contour specification for AM stations is more reasonable than the current 1 V/m standard, on the basis of the record of commenters in this proceeding who have the most substantial experience in the field of blanketing interference resolution. They generally agree that blanketing interference is not a problem in AM fields weaker than 4 V/m. We further believe that the one-year period for radio broadcaster responsibility -- that currently exists in the rules -- remains appropriate and should not be altered.

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REPLY COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS
AND THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.

I. INTRODUCTION AND SUMMARY

In response to the Commission's *Notice of Proposed Rule Making*,¹ the National Association of Broadcasters ("NAB")² filed comments³ which observed, at the outset, that radio broadcasting has been placed under blanketing rules for some time. However, NAB strongly argued in those comments that broadcasters should not be subjected to more onerous obligations, such as: (1) extending blanketing obligations to a range of other electronic equipment (such as telephone receivers -- either mobile or hard wire -- cable converters or any other "network" or "network terminal devices"); (2) mandating any "resolution" or "information" obligation after a year of the station's operation with its new or modified facilities; (3) imposing any special obligations *vis-à-vis* locations of

¹ See *Notice of Proposed Rule Making* ("Notice") in MM Docket No. 96-62, 11 FCC Rcd 4750 (1996).

² NAB is a nonprofit, incorporated association of television and radio stations and networks which serves and represents the American broadcast industry.

³ See Comments of NAB in MM Docket No. 96-62, filed June 25, 1996.

“temporary lodging or transient residences”⁴ or (4) extending blanketing regulations to the broadcast television service. The Commission’s *Notice* had proposed these kinds of extensions of broadcasters’ responsibilities. NAB emphasized throughout these comments that placing additional blanketing responsibilities on broadcasters would be unfair and unwarranted – and would encourage the continued manufacture of poorly designed and inferior telephones and other electronic equipment.

While many parties – several broadcasters among them – filed comments taking the same position of NAB, there also were comments submitted, by telephone and other electronic equipment manufacturers and their representatives, arguing that the Commission *should* adopt its proposed increases in broadcaster blanketing responsibilities. It is to these latter parties that NAB and the Association for Maximum Service Television (“MSTV”)⁵ today offers its reply.

As explained in NAB’s initial comments, the Commission should direct its regulatory efforts to the real cause of blanketing interference: the deficient design characteristics of electronic equipment which is unnecessarily susceptible to such blanketing effects. Correspondingly, it is the responsibility of these device manufacturers, as well as the communications companies that employ them (*e.g.*, telephone companies and cable operators), to take their own steps to avoid blanketing effects.

⁴ See *Notice*, *supra* note 1, ¶19

⁵ MSTV is a non-profit trade association of local broadcast television stations committed to achieving and maintaining the highest technical quality for the public’s local broadcast service.

II. THE ONLY SATISFACTORY MEANS OF MINIMIZING TELEPHONE BLANKETING INTERFERENCE PROBLEMS IS THROUGH THE IMPLEMENTATION OF A MANDATORY RF IMMUNITY STANDARD FOR ALL TELEPHONE TERMINAL EQUIPMENT

We emphatically disagree with the suggestion of the User Premises Equipment Division of the Telecommunications Industry Association ("TIA/UPED") and Lucent Technologies Inc. ("Lucent") that adherence to RF immunity specifications for telephone terminal equipment should be on a voluntary basis.⁶ The need for *mandatory* RF immunity requirements is obvious when one considers that: (1) the vast majority of telephone interference complaints involve home-based transmitters operated by individuals; and, (2) it is much more difficult to impose and enforce an interference resolution requirement on home-based transmitters than it is to impose and enforce such an immunity standard on electronic equipment manufacturers.

As TIA/UPED notes in its comments,⁷ broadcast signals are only involved in a *minority* of telephone interference complaints. In fact, more than two out of every three telephone interference complaints reported in the Commission's 1994 Telephone Interference Survey were the result of telephone set susceptibility to *non*-broadcast emissions, such as Citizens Band and Amateur radio signals.⁸ The adoption of a mandatory RF immunity standard would serve to address the problem of radio frequency interference to telephones from not only broadcast stations, but from Citizens Band and Amateur stations as well.

⁶ See Comments of TIA/UPED in MM Docket No. 96-62, filed June 25, 1996, at 1. See also Comments of Lucent in MM Docket No. 96-62, filed June 25, 1996, at 3.

⁷ See Comments of TIA/UPED, *supra* at 3.

⁸ See the "Telephone Interference Survey," May 2, 1994, prepared by the former Field Operations Bureau of the Federal Communications Commission.

Telephone terminal equipment's susceptibility to interference from Citizen's Band radio presents a particularly difficult problem for the Commission. Because Citizen's Band operators are not required to be licensed, the Commission has no records of who is operating radios and where they are located. It would be very difficult for the Commission to impose an interference resolution requirement on Citizens Band operators similar to the blanketing requirement that currently exists for broadcast radio stations because Commission staff would have to locate Citizen Band operators in order to enforce this requirement.

It might be marginally less difficult to impose an interference resolution requirement on Amateur operators, because they are required to hold a Commission license. However, this still would be a daunting task, and for many of the same reasons that would apply to imposition of such a requirement on Citizen's Band operators.

Again, the vast majority of telephone interference complaints are the result of telephone set designs that make these sets particularly susceptible to RF interference from sources such as Citizen's Band and Amateur radio signals. Because it is not practical to impose requirements for resolving interference complaints on Citizen's Band and Amateur radio operators, it is clear that the Commission must specify design criteria for telephone sets that will enable them to withstand the signal levels present in the general vicinity of radio transmitters.

It would be insufficient and inappropriate for the Commission to impose on broadcasters any blanketing interference requirements with respect to telephones. Imposing a requirement on broadcasters to resolve interference in telephones would do

nothing to resolve the vast majority of interference cases, making any such requirement an insufficient response to the problem of poor telephone design. Such a requirement also would be inappropriate because, as we noted in our comments on the *Notice*, RF interference in telephones occurs not due to any operational deficiency, unauthorized transmission or any other failing upon the part of broadcasters. Rather, it occurs due to the design characteristics of the “interfered-with” electronic equipment.⁹

III. THE COMMISSION ALSO SHOULD ADOPT MANDATORY RF IMMUNITY REQUIREMENTS FOR *ALL* CONSUMER ELECTRONIC DEVICES

Mandatory radio frequency immunity requirements should be adopted for all consumer electronics equipment, for the same reasons that they should be adopted for telephone terminal equipment. Consumers should be able to live nearly anywhere (*e.g.*, next door to a “CBer,” an Amateur Radio operator, or a broadcast station) and expect their consumer electronics equipment to work properly. Also, upon relocation, they should not be empowered to engage in an FCC-sanctioned fight with their new broadcast, CB or Amateur neighbor.

It is clear that mandatory RF immunity requirements are necessary. To this point the consumer electronics industry has displayed virtually no sense of manufacturing responsibility when it comes to the issue of RF immunity. It is unlikely that, without a mandatory requirement, manufacturers of consumer electronics will do anything to alleviate any RF interference problems that their customers are having.

⁹ See Comments of NAB in MM Docket No. 96-62, *supra* note 3, at 1.

Underscoring this point, the Consumer Electronics Manufacturers Association (“CEMA”), in its comments, says that television broadcasters should be subject to blanketing requirements, and it suggests that the blanketed area for a television station should be defined as the station’s 100 mV/m contour.¹⁰ CEMA’s reasoning for selecting the 100 mV/m contour is that Section 15.118 of the Commission’s Rules¹¹ requires television receivers to “tolerate only 100 mV/m in ‘direct pick up’ interference.”¹² The obvious implication here is that television receiver manufacturers cannot be expected to produce products voluntarily that can withstand levels of ambient RF energy that are any greater than those specified by the Commission. For this reason, and others, mandatory RF immunity requirements must be adopted.

To assert further the position -- and to emphasize the lack of responsibility -- of the electronics manufacturing industry, CEMA makes the incredible assertion that:

“[b]y limiting a broadcaster’s responsibility to remedy interference complaints to the *broadcaster’s* conduct, the Commission will not be addressing the heart of today’s interference of [sic] problems. To successfully deal with blanketing interference, the Commission’s rules should require broadcasters to remedy interference complaints based on *consumer* action as well.”¹³

¹⁰ Comments of CEMA in MM Docket No. 96-62, late filed on June 26, 1996, at 3-4.

¹¹ 47 C.F.R. § 15.118.

¹² *Id.* at 3.

¹³ Comments of CEMA, *supra* note 9, at 5.

It is outrageous for CEMA to suggest that broadcasters should be responsible for interference caused by the actions of non-broadcasters, and we find it equally galling that manufacturers of consumer electronics equipment would attempt to blame blanketing interference on the actions of their customers when, as we have already noted, it is clear that blanketing interference is the result of manufacturers' failure to produce equipment with adequate RF immunity. CEMA's comments make it clear that the Commission cannot expect the consumer electronics industry voluntarily to produce equipment that meets any useful and effective RF immunity standard; NAB therefore, and once again, urges the Commission to initiate a proceeding expeditiously that will result in the adoption of mandatory RF immunity requirements for all consumer electronics equipment. In the meantime, as well as after such regulatory action *vis-à-vis* immunity standards for telephones and other electronic equipment, broadcasters' blanketing responsibilities should not be extended to any of these types of electronic equipment.

IV. THERE IS NO EVIDENCE TO SUPPORT THE IMPOSITION OF A BLANKETING REQUIREMENT ON TELEVISION BROADCASTERS

None of the commenters in this proceeding has provided any evidence to support the imposition of blanketing interference requirements on television broadcasters. In fact, the commenters who are most directly involved in the resolution of blanketing interference complaints say that there "is no clear basis for the establishment of blanketing interference rules for television broadcasting,"¹⁴ that "it is [their] experience that TV blanketing

¹⁴ See Comments of the Association of Federal Communications Consulting Engineers ("AFCCE") in MM Docket No. 96-62, filed June 25, 1996, at 6.

interference is not a significant problem requiring a specific rule,”¹⁵ and that there is “no technical justification” for extending the concept of a 115 dBu blanketing contour to TV stations.¹⁶

As noted above, CEMA contend that a blanketing requirement should be imposed on television broadcasters, and suggests that this standard should be the 100 mV/m contour because Section 15.118 of the Commission’s Rules requires television receivers to tolerate only 100 mV/m in “direct pick up” interference. CEMA clearly has confused “direct pick up” interference with blanketing interference. Blanketing interference, as the Commission correctly described in its *Notice*, occurs when “a station’s signal strength or signal power density is of such magnitude that it causes the receiver near the transmitting antenna to be partially or completely blocked from receiving *other* broadcast stations.”¹⁷ [Emphasis added.]

In blanketing interference, the “victim” receiver experiences a reduction in receiver sensitivity caused by radio frequency signal strength overload from a nearby transmitter. This reduction in sensitivity, or “desensitization,” prevents the receiver from receiving signals on frequencies other than the one being transmitted by the nearby transmitter. “Direct pick up” interference, on the other hand, occurs when a cable-ready television receiver is receiving a television signal via cable and simultaneously picking up, directly off the air, a local television station on the same channel. This type of interference differs significantly from blanketing interference because it does not involve receiver

¹⁵ See Comments of duTreil, Lundin & Rackley (“DLR”) in MM Docket No. 96-62, filed June 25, 1996, at 2.

¹⁶ See Comments of Hammett & Edison, Inc. (“HE”) in MM Docket No. 96-62, filed June 25, 1996, at 2.

¹⁷ See *Notice supra* note 1, at ¶ 2.

desensitization and the only channel that experiences interference is the same channel of the over-the-air broadcast station in question.

Establishing new requirements to address “direct pick up” interference clearly is beyond the scope of this proceeding. However, to the extent that this type of interference is a significant problem in cable ready television receivers, we urge the Commission to consider initiating another proceeding to address the need for raising the “direct pick up” threshold in Section 15.118 to a level greater than 100 mV/m.

V. NAB SUPPORTS THE REQUEST OF SEVERAL ENGINEERING CONSULTANTS TO HAVE THE BLANKETED AREA AROUND AM BROADCAST FACILITIES REDEFINED

Both DLR and AFCCE suggest that the Commission should decrease the area around AM broadcast stations that is considered to be “blanketed.”¹⁸ AFCCE suggests that the blanketing area be reduced to the 3 V/m contour; however, the supporting evidence that it provides, and the comments provided by DLR, suggest that a 4 V/m contour would be more appropriate. No other commenters provide any evidence that would support maintaining the current 1 V/m contour specification. NAB believes that a 4 V/m blanketing contour specification for AM stations is more reasonable than the current standard, on the basis of the record of commenters in this proceeding who have the most substantial experience in the field of blanketing interference resolution. They generally agree that blanketing interference is not a problem in AM fields weaker than 4 V/m. We recommend, therefore, that the Commission modify its rules accordingly.

¹⁸ See Comments of DLR, *supra*, at 1. See also Comments of AFCCE, *supra*, at 4.

VI. THE PERIOD OF RESPONSIBILITY FOR RESOLVING BLANKETING COMPLAINTS SHOULD NOT BE EXTENDED

NAB strongly opposes CEMA's suggestion that a broadcaster should be required to resolve all blanketing interference problems that occur within six months after a *consumer* moves into, or tries to use new equipment within, the blanketing contour of the broadcast station.¹⁹ Aside from the obvious difficulties of implementing such a rule (*e.g.*, who would determine the time when a consumer first tries to use a piece of equipment?), it would clearly place an unfair and unwarranted burden on broadcasters. Such a rule would make broadcasters responsible for resolving blanketing interference problems around their transmitter sites *forever*, even in cases where a new resident moves into a blanketed area after the broadcaster has been operating in the same location for many years.

It is only fair and reasonable to limit a broadcaster's responsibility for resolving blanketing interference to a finite period of time after the *broadcaster* installs a new transmitter or implements a significant facility change. As we noted earlier, the adoption of mandatory RF immunity standards for all consumer electronics equipment is the appropriate way for the Commission to address concerns about interference to consumer devices that are brought into the blanketed area after (or indeed before) the broadcaster's responsibility to resolve blanketing interference has expired. Again, the broadcaster is transmitting a signal that *complies* with well-known and reasoned FCC technical standards. Blanketing interference occurs when manufacturers of electronic equipment

¹⁹ See CEMA comments at 4.

fail to design their equipment to withstand the well-known levels of RF energy that are present in the immediate vicinity of a broadcast transmitter.

We believe that the one-year period for radio broadcaster responsibility that currently exists in the rules remains appropriate and should not be altered.

VII. NO NEW RECORDKEEPING OR RESPONSE TIME REQUIREMENTS SHOULD BE IMPOSED ON BROADCASTERS

We oppose CEMA's suggestion (based on a provision in the *Notice*²⁰) that broadcasters should be required to respond to consumer complaints within 10 days and resolve them within 30 days.²¹ We also oppose the more general suggestions regarding mandating a response time offered by Safety & Supply Company.²² There is insufficient evidence in the record of this proceeding to indicate that any such requirements are necessary. History has shown that the instances of broadcaster sluggishness and/or intransigence in responding to legitimate blanketing complaints constitute only a fraction of a percentage point of the total number of facility modifications and new station installations that have occurred since the Commission first imposed its current blanketing requirements.

Thus, it would be inappropriate for the Commission to burden many thousands of broadcasters with specific response time requirements, and bureaucratic recordkeeping requirements, based on a relatively small number of instances where the Commission was forced to intervene on behalf of complainants. Rather, the regulatory focus on any blanketing interference remedial action, let alone "timed" remedial action, should be on

²⁰ *Notice*, *supra* note 1, ¶25 and Appendix A.

²¹ *See* Comments of CEMA, *supra*, at 5.

²² *See* Comments of Safety & Supply Company in MM Docket No. 96-62, filed May 30, 1996, at 1.

the manufacturer of the equipment -- as part of a “buyer/seller relationship and “fitness for purpose” obligation -- and/or on the telephone company, cable television company, etc. as part of a genuine consumer/service relationship.

VIII. CONCLUSION

Broadcasting is a mature service. It is part of the American residential, leisure and business office environment. It should be no secret to the manufacturers of electronic equipment, and to the operators of cable systems, telephone companies or other electronics-based companies that broadcasters and their signals will exist in all geographic areas where their products or services will be employed. Thus, it the obligation of these parties -- manufacturers of electronic equipment and companies (*e.g.* telephone companies and cable television companies) employing such equipment to address and remedy blanketing occurrences beyond those addressed by the Commission’s existing blanketing regulations.

Again, the Commission must not unfairly expand radio broadcasters’ blanketing obligations, in terms of time period, location or the nature of the electronic device involved. Moreover, we believe it is at least premature for the FCC to impose any new

television blanketing rule regulation. The transition to digital television and the paucity of television blanketing complaints argue strongly against the Commission adopting a television blanketing rule in this proceeding

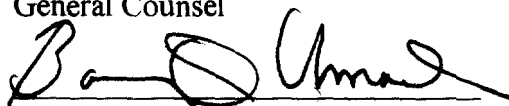
Respectfully submitted,

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